ATTACHMENT A
Remarks

Claims 1-9 stand pending in the present application. By this Amendment, Applicants have amended claims 1-9 and canceled claim 10. Applicants respectfully submit that the present application is in condition for allowance based on the discussion which follows.

Claims 1-3 and 7-9 were rejected under 35 U.S.C. § 102(b) as being anticipated by Nishimura et al (J. Am. Chem. Vol. 110, pp. 7249-50, hereinafter "Nishimura") which the Examiner alleges discloses the claimed siastatin B compounds.

As an initial point, it is important to note that claims 1-3 are not directed to siastatin B itself but are respectively directed to a siastatin B derivative of formula (I), a siastatin B derivative of formula (V) and a siastatin B derivative of the formula (X) as recited in the claims. Further, claims 7-9 are directed to a pharmaceutical composition or glycosidase inhibitor based on a siastatin B derivative of formula (I), (V) and (X).

Although the Examiner alleges that Nishimura teaches siastatin B compounds as recited in the present claims citing page 7249 Chart I compound number (2), Nishimura fails to teach or suggest the presently claimed siastatin B derivatives as defined in the present claims. With respect to Chart I shown at page 7249 of Nishimura, the compound number (2) is N-acetylneuraminic acid having the chemical formula shown as containing an oxygen-intervented sugar framework. First, N-acetylneuraminic acid (compound (2)) has a different chemical structure from that of "siastatin B" (compound (1)) which as the chemical structure shown at the top of the right-hand column at page 7249 of the cited reference of Nishimura. Second, N-acetylneuraminic acid has a

different chemical structure from that of the claimed siastatin B derivatives of formula (I), (V) and (X).

Based on the foregoing, Applicants respectfully submit that claims 1-3 and 7-9 are not anticipated by Nishimura. Accordingly, Applicants respectfully request that the rejection to claims 1-3 and 7-9 be withdrawn.

Claim 10 was rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. By this Amendment, Applicant has canceled claim 10 thereby rendering the rejection moot.

Claims 4-6 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Jensen et al (hereinafter "Jensen") in view of Nishimura et al., "Totally Synthetic Analogs of Siastatin B" (hereinafter "Nishimura II") and Kudo et al (hereinafter "Kudo").

Contrary to the § 103(a) rejection based on Jensen, Jensen is not prior art of the present application as the present application has an effective filing date of the International Patent Application No. PCT/JP99/07269 to which this present application is a national stage § 371 application. Since Jensen has a publication date of April 12, 2002, and the international patent application has a filing date of December 24, 1999, Jensen is not prior art of the present application.

Further, an effective filing date can be established back to the filing date of the Japanese priority document of the international patent application thus establishing an effective filing date of December 25, 1998 and according an earlier date of invention.

Furthermore, Nishimura II fails to teach or suggest the claimed starting materials of formula (I) on page 963 of the complete copy of Nishimura II wherein only the

structure of siastatin B and of N-acetylneuraminic acid are presented (see the attached complete copy of Nishimura II).

The siastatin B derivatives of the formula (II) which is employed as a starting material in the processes of the claim 4 and claim 5, as well as the siastatin B derivative of the formula (IV) which is employed in the process of claim 6 are nowhere shown nor suggested in the secondary reference of Nishimura II, nor in the cited third reference of Kudo (see the attached complete copy of Kudo).

Accordingly, contrary to the Examiner's assertion, neither the claimed process nor the claimed siastatin B compound would have been obvious in view of the cited art.

Based on the foregoing, Applicants respectfully submit that claims 4-6 are not obvious under 35 U.S.C. § 103(a) in view of the cited art.

In view of the foregoing, Applicants respectfully submit that the present application is in condition for allowance.

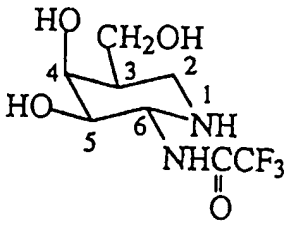
END REMARKS

ATTACHMENT B
Amendments to the Claims

Please cancel claim 10 without prejudice or disclaimer.

This listing of claims will replace all prior versions, and listings, of claims in the application.

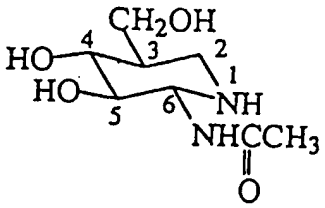
1. (Currently Amended) 6-Deacetamido-3-decarboxy-3-hydroxymethyl-6-trifluoroacetamido-siastatin B ~~siastain B~~ represented by the formula (I):



(I)

or a pharmaceutically acceptable salt thereof.

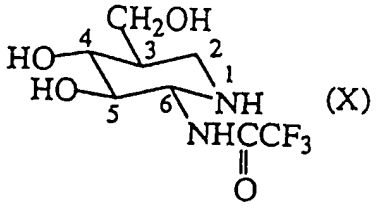
2. (Currently Amended) 3-Decarboxy-4-epi-3-hydroxymethyl-siastatin B ~~siastain B~~ represented by the formula (V):



(V)

or a pharmaceutically acceptable salt thereof.

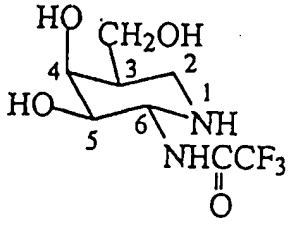
3. (Currently Amended) 6-Deacetamido-3-decarboxy-4-epi-3-hydroxymethyl-6-trifluoroacetamido-siastatin B ~~siastain B~~ represented by the formula (X):



(X)

and a pharmaceutically acceptable salt thereof.

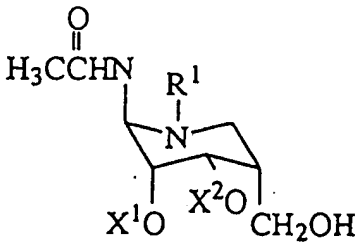
4. (Currently Amended) A process for the production of 6-deacetamido-3-decarboxy-3-hydroxymethyl-6-trifluoroacetamido-siastatin B ~~siastain B~~ represented by the formula (I):



(I)

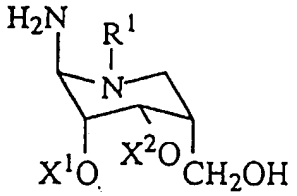
according to claim 1, characterized in that the process comprises:

eliminating the *N*-acetyl group from an *N*-protected or unprotected-4,5-O-protected-3-hydroxymethyl-3-decarboxy-siastatin B represented by the general formula (II):



(II)

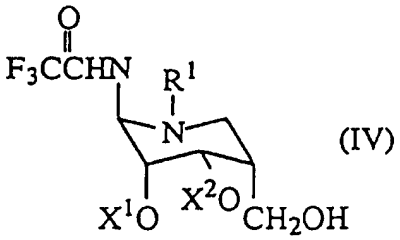
wherein R^1 is a hydrogen atom or an imino-protecting group, X^1 and X^2 each are a monovalent hydroxyl-protecting group, or both X^1 and X^2 together denote a divalent hydroxyl-protecting group, to produce an *N*-protected or unprotected-4,5-O-protected-3-hydroxymethyl-de-*N*-acetyl-3-decarboxy-siastatin B represented by the general formula (III):



(III)

wherein R^1, X^1 and X^2 have the same meanings as above;

trifluoroacetylating the free amino group of the compound of the formula (III), to produce an *N*-protected or unprotected-4,5-O-protected-6-deacetamido-3-hydroxymethyl—6-trifluoroacetamido-3-decarboxy-siastatin B represented by the general formula (IV):

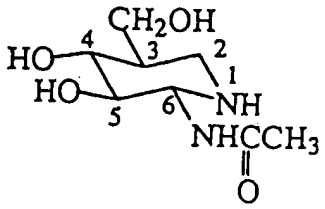


(IV)

wherein R^1, X^1 and X^2 have the same meanings as above;

and then eliminating the imino-protecting group (R^1) if present, and eliminating the hydroxyl-protecting groups (X^1 and X^2) from the compound of the formula (IV).

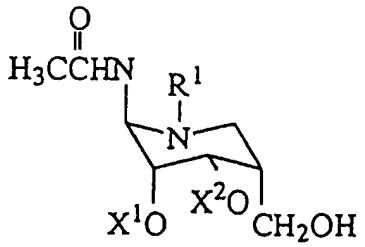
5. (Currently Amended) A process for the production of 3-decarboxy-4-epi-3-hydroxymethyl-siastatin B ~~siastain B~~ represented by the formula (V):



(V)

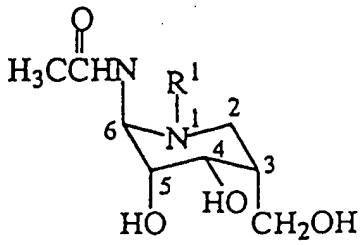
according to claim 2, characterized in that the process comprises:

eliminating the hydroxyl-protecting groups (X^1 and X^2) from an *N*-protected or unprotected-4,5-O-protected-3-hydroxymethyl-3-decarboxy-siastatin B represented by the general formula (II):



(II)

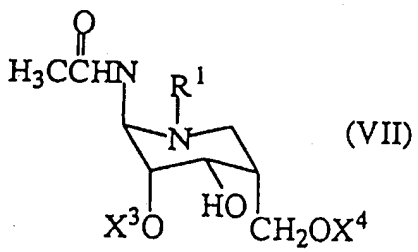
wherein R^1 is a hydrogen atom or an imino-protecting group, and X^1 and X^2 each are a monovalent hydroxyl-protecting group, or both X^1 and X^2 together denote a divalent hydroxyl-protecting group, to produce an *N*-protected or unprotected-3-hydroxymethyl-3-decarboxy-siastatin B represented by the general formula (VI):



(VI)

wherein R^1 has the same meanings as above;

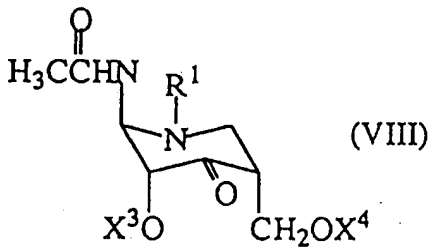
protecting both of the hydroxyl group at 3-position and the free hydroxyl group at 5-position of the compound of the formula (VI), to produce an *N*-protected or unprotected-5-O-protected-3-protected-hydroxymethyl-3-decarboxy-siastatin B represented by the general formula (VII):



(VII)

wherein R^1 is a hydrogen atom or an imino-protecting group, X^3 and X^4 each denote a hydroxyl-protecting group;

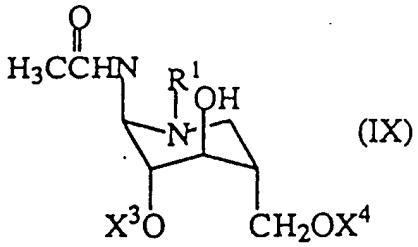
oxidizing the hydroxyl group at 4-position of the compound of the formula (VII), to produce an *N*-protected or unprotected-4-keto-5-O-protected-3-protected-hydroxymethyl-3-decarboxy-siastatin B represented by the general formula (VIII):



(VIII)

wherein R^1, X^3 and X^4 have the same meanings as above;

reducing the keto group at 4-position of the compound of the formula (VIII), to produce an *N*-protected or unprotected-4-epi-5-O-protected-3-protected-hydroxymethyl-3-decarboxy-siastatin B represented by the general formula (IX):

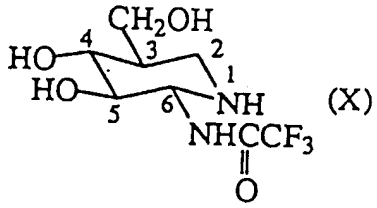


(IX)

wherein R^1, X^3 and X^4 have the same meanings as above;

and then eliminating the imino-protecting group (R^1) if present, and eliminating the hydroxyl-protecting groups (X^3 and X^4) from the compound of the formula (IX).

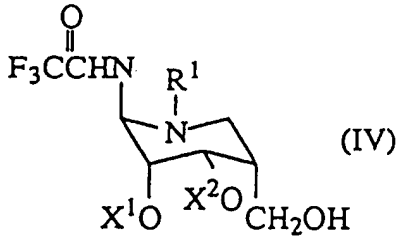
6. (Currently Amended) A process for the production of 6-deacetamido-3-decarboxy-4-epi-3-hydroxymethyl-6-trifluoroacetamido-siastatin B ~~siastain B~~ represented by the formula (X):



(X)

according to claim 3, characterized in that the process comprises:

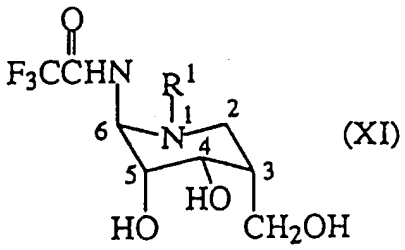
providing by the process according to claim 4, an *N*-protected or unprotected-4,5-O-protected-6-deacetamido-3-hydroxymethyl—6-trifluoroacetamido-3-decarboxy-siastatin B represented by the general formula (IV):



(IV)

wherein R^1 is a hydrogen atom or an imino-protecting group, X^1 and X^2 each are a hydroxyl-protecting group, or both X^1 and X^2 together denote a divalent hydroxyl-protecting group;

eliminating the hydroxyl-protecting groups (X^1 and X^2) from the compound of the formula (IV), to produce an *N*-protected or unprotected-6-deacetamido-3-hydroxymethyl—6-trifluoroacetamido-3-decarboxy-siastatin B represented by the general formula (XI):

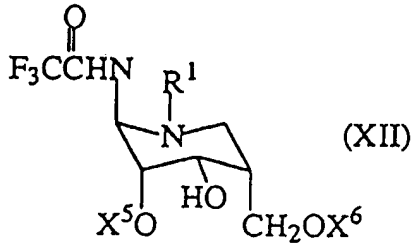


(XI)

wherein R^1 has the same meaning as above;

protecting both of the hydroxyl group at 3-position and the free hydroxyl group at 5-position of the compound of the formula (XI), to produce an *N*-protected or

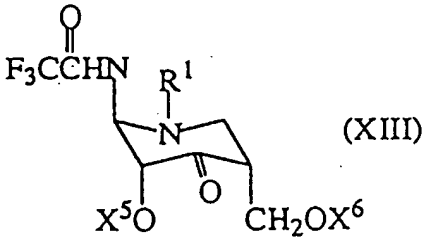
unprotected-5-O-ptotected-6-deacetamido-3-protected hydroxymethyl—6-trifluoroacetamido-3-decarboxy-siastatin B represented by the general formula (XII):



(XII)

wherein R^1 is a hydrogen atom or an imino-protecting group, X^5 and X^6 each are a hydroxyl-protecting group;

oxidizing the hydroxyl group at 4-position of the compound of the formula (XII), to produce an *N*-protected or unprotected-5-O-ptotected-4-keto-6-deacetamido-3-protected hydroxymethyl—6-trifluoroacetamido-3-decarboxy-siastatin B represented by the general formula (XIII):

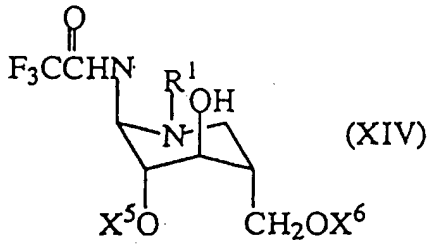


(XIII)

wherein R^1, X^5 and X^6 have the same meanings as above;

reducing the keto group at 4-position of the compound of the formula (XIII), to produce an *N*-protected or unprotected-5-O-ptotected-4-epi-6-deacetamido-3-protected-

hydroxymethyl—6-trifluoroacetamido-3-decarboxy-siastatin B represented by the general formula (XIV):



(XIV)

wherein R^1, X^5 and X^6 have the same meanings as above;

and then eliminating the imino-protecting group (R^1) if present, and eliminating the hydroxyl-protecting groups (X^5 and X^6) from the compound of the formula (XIV).

7. (Currently Amended) A pharmaceutical composition comprising as an active ingredient 6-deacetamido-3-decarboxy-3-hydroxymethyl-6-trifluoroacetamido-siastatin B ~~siastain B~~ of the formula (I) as claimed in Claim 1, or 3-decarboxy-4-epi-3-hydroxymethyl-siastatin B ~~siastain B~~ of the formula (V) as claimed in Claim 2, or 6-deacetamido-3-decarboxy-4-epi-3-hydroxymethyl-6-trifluoroacetamido-siastatin B ~~siastain B~~ of the formula (X) as claimed in Claim 3, or a pharmaceutically acceptable salt thereof, in combination with a pharmaceutically acceptable carrier.

8. (Original) A pharmaceutical composition according to claim 7, which is used as an anticancer agent, an antidiabetic agent or an antiobestic agent.

9. (Currently Amended) A glycosidase inhibitor consisting of 6-deacetamido-3-decarboxy-3-hydroxymethyl-6-trifluoroacetamido-siastatin B ~~siastain B~~ of the formula (I) as claimed in Claim 1, or 3-decarboxy-4-epi-3-hydroxymethyl-siastatin B ~~siastain B~~ of the formula (V) as claimed in Claim 2, or 6-deacetamido-3-decarboxy-4-epi-3-hydroxymethyl-6-trifluoroacetamido-siastatin B ~~siastain B~~ of by the formula (X) as claimed in Claim 3, or a pharmaceutically acceptable salt thereof.

10. (Canceled)